

# Strengthening awareness can lead to stronger bones

By Barbara Anderson / **The Fresno Bee**- August 20, 2006

## ► Osteoporosis Facts

A woman older than 50 has a one-in-two chance of breaking a bone in her lifetime. Men have a one-in-four chance of a fracture.

Yet many people don't know how to avoid falls and keep their bones strong, according to a Fresno State osteoporosis study done in collaboration with the San Joaquin Gardens retirement community.

Education about bone health, particularly one-on-one counseling, is needed to prevent broken bones, researchers found.

A screening of residents at San Joaquin Gardens in northeast Fresno showed 57% were at high risk for osteoporosis and 20.4% were at moderate risk.

Osteoporosis is a disease in which bones become weak and can break easily. The California Department of Health Services estimates 55,000 osteoporosis-related fractures occur each year in California, costing \$2.4 billion for medical care.

Most of the San Joaquin Gardens residents who participated in the study had five risk factors out of 11 or 12 that researchers looked at, said lead researcher Annie Burke-Doe, an assistant professor of physical therapy at California State University, Fresno.

Risk factors for osteoporosis include:

Being older than 65.

Not getting enough calcium and vitamin D.

Being inactive.

Losing height with age.

Having a small bone structure.

Taking medications that can affect bones.

But the residents knew little about the bone disease or how to prevent it.

"It was a good group to educate about preventing falls or stopping bone breakdown," Burke-Doe said.

Eighty seniors answered a 20-question osteoporosis questionnaire to gauge their knowledge.

On average, the seniors answered eight questions correctly.

Half of the seniors attended a six-week osteoporosis education class taught by graduate students and faculty from Fresno State's College of Health and Human Services. After the class, the seniors were retested about the disease.

"Their knowledge had improved," Burke-Doe said. "They got 14 out of the 20 questions correctly — instead of eight."

The goal of the Bones of Steel: Osteoporosis Risk and Education study was to see whether seniors who were educated about the disease and its risks would change eating, exercise and other habits to improve their bone health.

Each participant received a report card, detailing what they needed to keep their bones strong — from increasing their intake of calcium and vitamin D to exercising on a regular basis.

The individual assessment motivated seniors, said Mark Tolladay, director of fitness and recreation at San Joaquin Gardens.

"They made better food choices. Some began participating in an exercise program or if they had stopped, they came back to exercise classes," he said.

San Joaquin Gardens resident Idaleen Conklin, 74, has paid more attention to her diet since taking the osteoporosis class.

"I'm eating better," she said last week.

And she's exercising more regularly at the San Joaquin Gardens fitness gym. "I was getting pretty lax," she said.

When Burke-Doe approached San Joaquin Gardens about being the site for the study, Tolladay said, "it seemed like a really good fit."

San Joaquin Gardens has a wellness program that fosters physical as well as mental health.

The community includes 179 apartments for seniors who live independently, 42 apartments for people who need assistance and an 88-bed skilled-nursing home.

The American Association of Homes and Services for the Aging awarded San Joaquin Gardens its 2006 excellence in research and education award for the osteoporosis study.

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